AMENDMENTS TO THE CLAIMS

Please cancel claims 1-18 and 20-32. Please add new claim 33.

1.-18. (Cancelled)

- 19. (Previously Presented) In a system comprising a host computer containing a plurality of virtual servers which support a private network address space wherein the private network address spaces of two or more of the virtual servers overlap, a method for providing private network services using private addresses in a location remote from private network users, the method comprising:
 - storing a customer lookup table, the customer lookup table storing associations between physical interfaces and tunnel identifiers identifying tunnels for private networks and a plurality of customer forwarding tables;
 - storing a plurality of customer forwarding tables, the customer forwarding tables associating network addresses with physical interfaces and tunnel identifiers;
 - receiving, over a tunnel, a transmission on a physical interface, the transmission containing a tunnel identifier;
 - determining the correct customer forwarding table from the customer lookup table using the physical interface and the tunnel identifier;
 - determining via the customer forwarding table a physical interface and tunnel identifier associated with a network address of the transmission; and sending the transmission to the network address on the determined physical interface using the determined tunnel identifier.

20.-32. (Cancelled)

- A computer-readable medium containing a computer program product for 33. (New) providing private network services using private addresses in a location remote from private network users, wherein a host computer contains a plurality of virtual servers which support a private network address space and wherein the private network address spaces of two or more of the virtual servers overlap, the computer program product comprising:
 - program instructions for storing a customer lookup table, the customer lookup table storing associations between physical interfaces and tunnel identifiers identifying tunnels for private networks and a plurality of customer forwarding tables;
 - program instructions for storing a plurality of customer forwarding tables, the customer forwarding tables associating network addresses with physical interfaces and tunnel identifiers;
 - program instructions for receiving, over a tunnel, a transmission on a physical interface, the transmission containing a tunnel identifier;
 - program instructions for determining the correct customer forwarding table from the customer lookup table using the physical interface and the tunnel identifier;
 - program instructions for determining via the customer forwarding table a physical interface and tunnel identifier associated with a network address of the transmission; and
 - program instructions for sending the transmission to the network address on the determined physical interface using the determined tunnel identifier.